

Metabolic Syndrome

Understanding Health Risk Indicators
and Proper Application to Worker
Safety and Health

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BIO

Mike Stumbo has been employed as a Security Police Officer at the Pantex site for 20 years and is the Safety Officer for the Pantex Guards Union. Mike attended the OSHA Training Institute in Dallas Texas, where he received his certification as a Safety and Health Official in the fields of General Industry and Construction. Mike is currently the President of the National Council of Security Police representing approximately 3000 Dept of Energy Security Police Officers.



The Situation



"What fits your busy schedule better, exercising one hour a day or being dead 24 hours a day?"

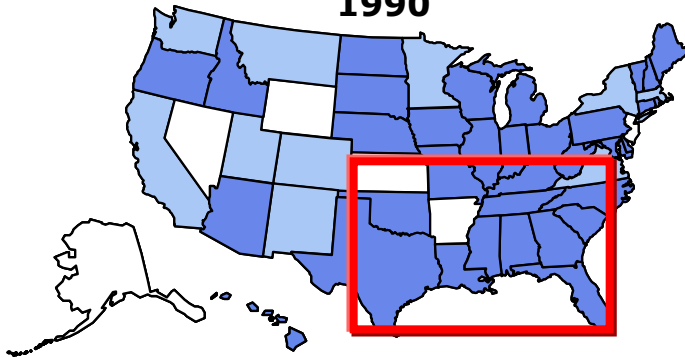
America's South is the most unfit region of our increasingly-unfit nation. Consequently, it serves as a perfect testing ground for a wellness program's validity. If a preventive wellness model works here, it will work anywhere.



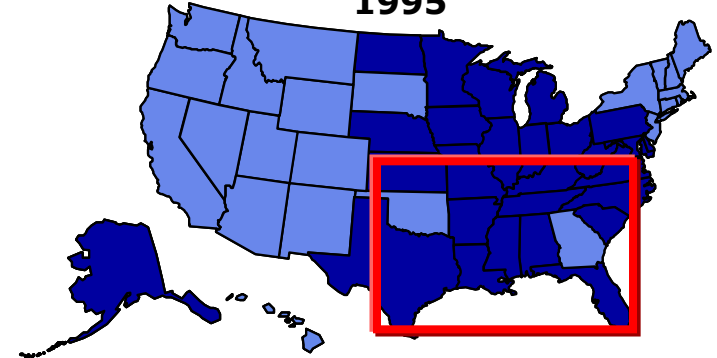
Obesity Trend

(*BMI ≥ 30 , or about 30 lbs overweight for 5'4" person)

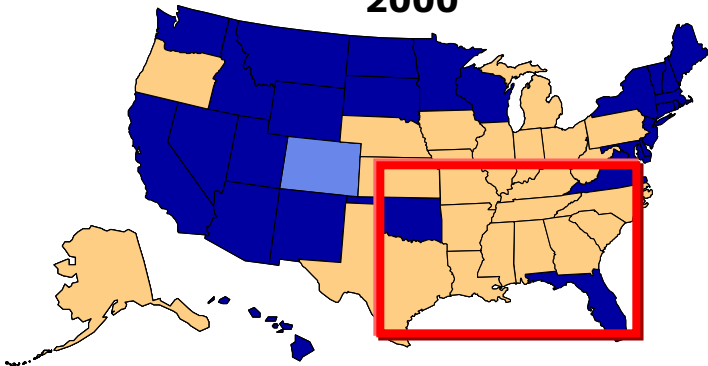
1990



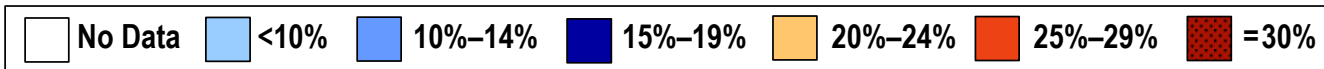
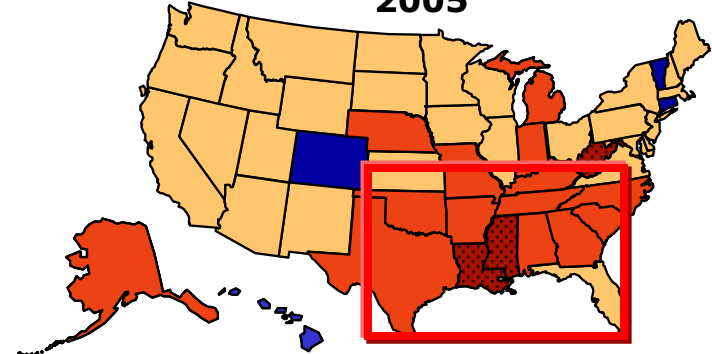
1995



2000

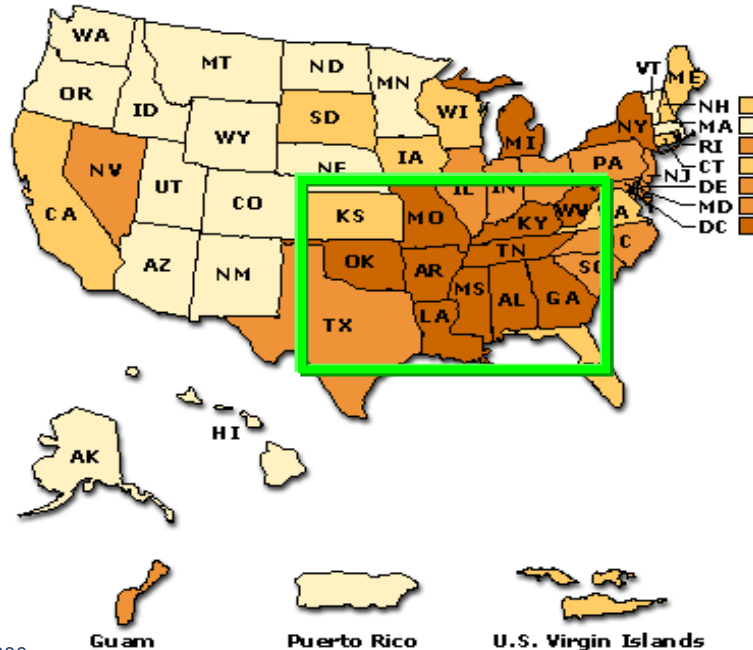


2005



Disease Rates per 100,000

Heart Disease



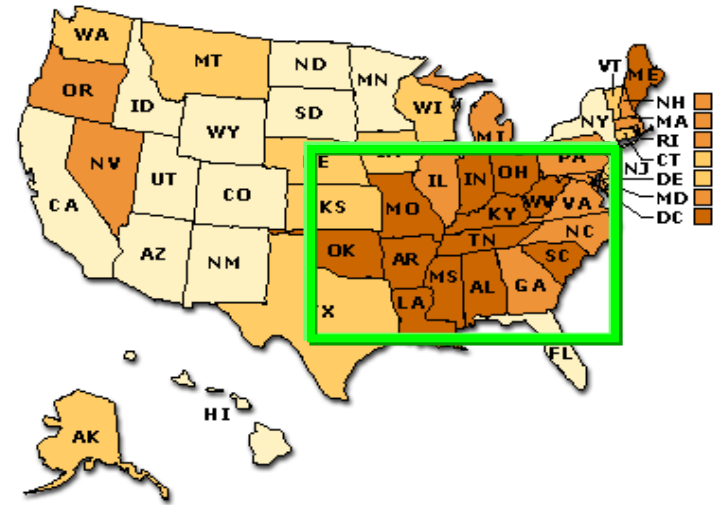
- Less than 200
- 200 to 219.9
- 220 to 250
- More than 250

Guam

Puerto Rico

U.S. Virgin Islands

Cancer



- Less than 185
- 185 to 196.9
- 197 to 204
- More than 204

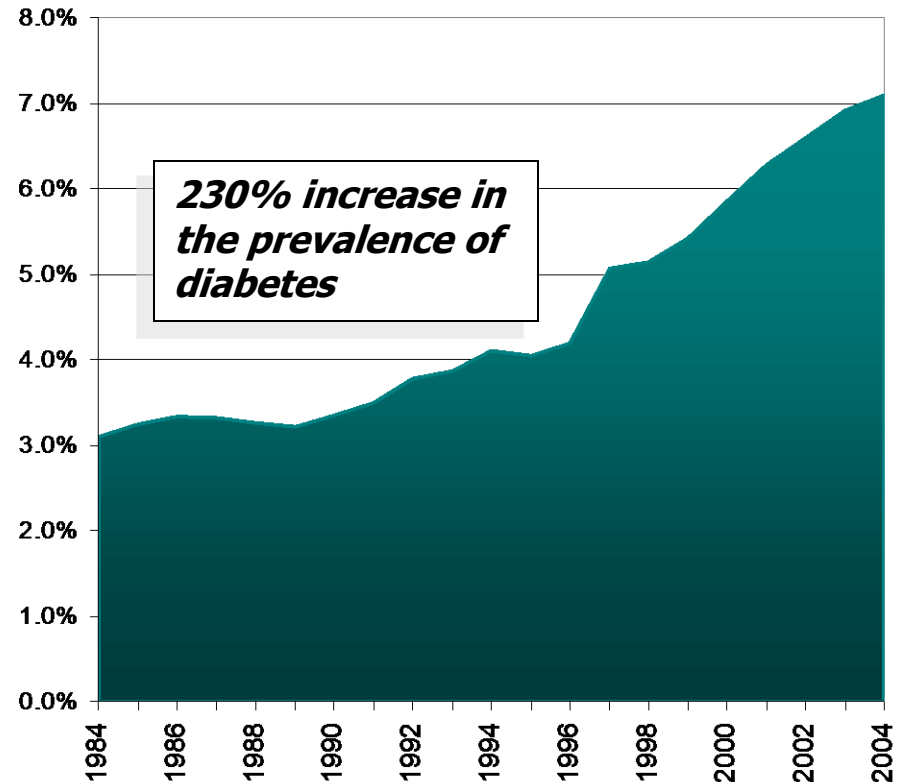
Source: Kaiser Family Foundation, State Health Facts



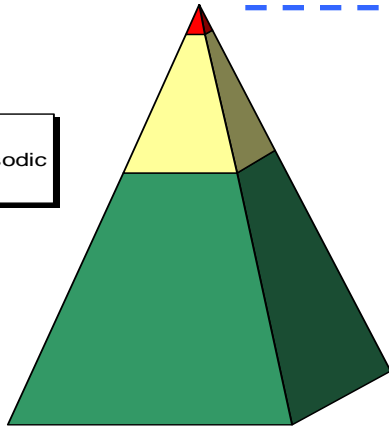
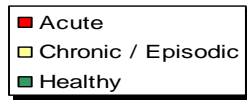
Diabetes

- America is “producing” too much disease.
- One out of every three Americans will develop Type 2 diabetes by the age of 50.
- And it will be even worse for some...

Diagnosed Diabetes Prevalence - Age 18+
CDC National Health Interview Survey - 1984 to 2004

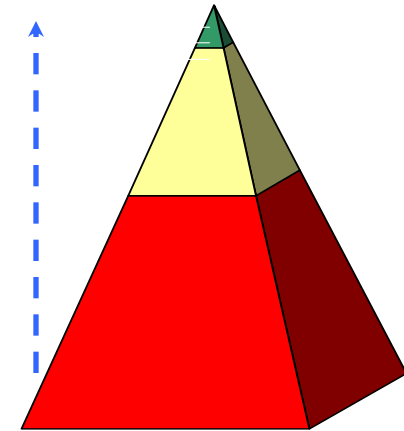


The 5/50 Principle



Plan Participants

Effective future cost control comes from a focus on the small fraction (<5%) of participants who account for the majority (>50%) of the claim cost.



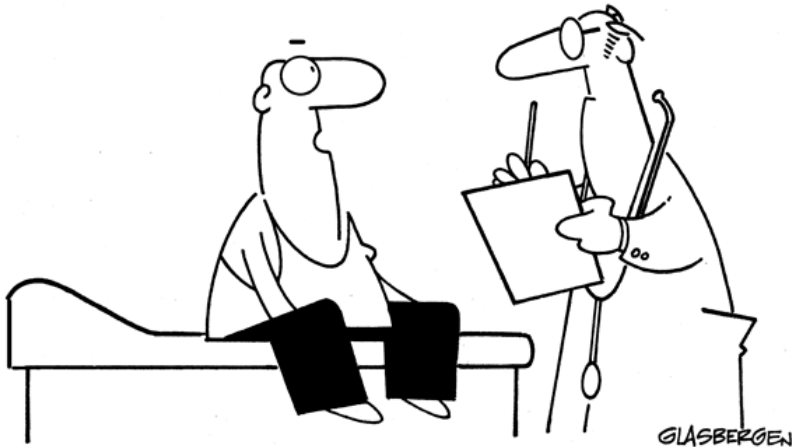
Annual Paid Claims

- Who are the next claimants to enter the red category?
- Can anything be done to measurably reduce their likelihood of reaching this high cost category?



Metabolic Syndrome

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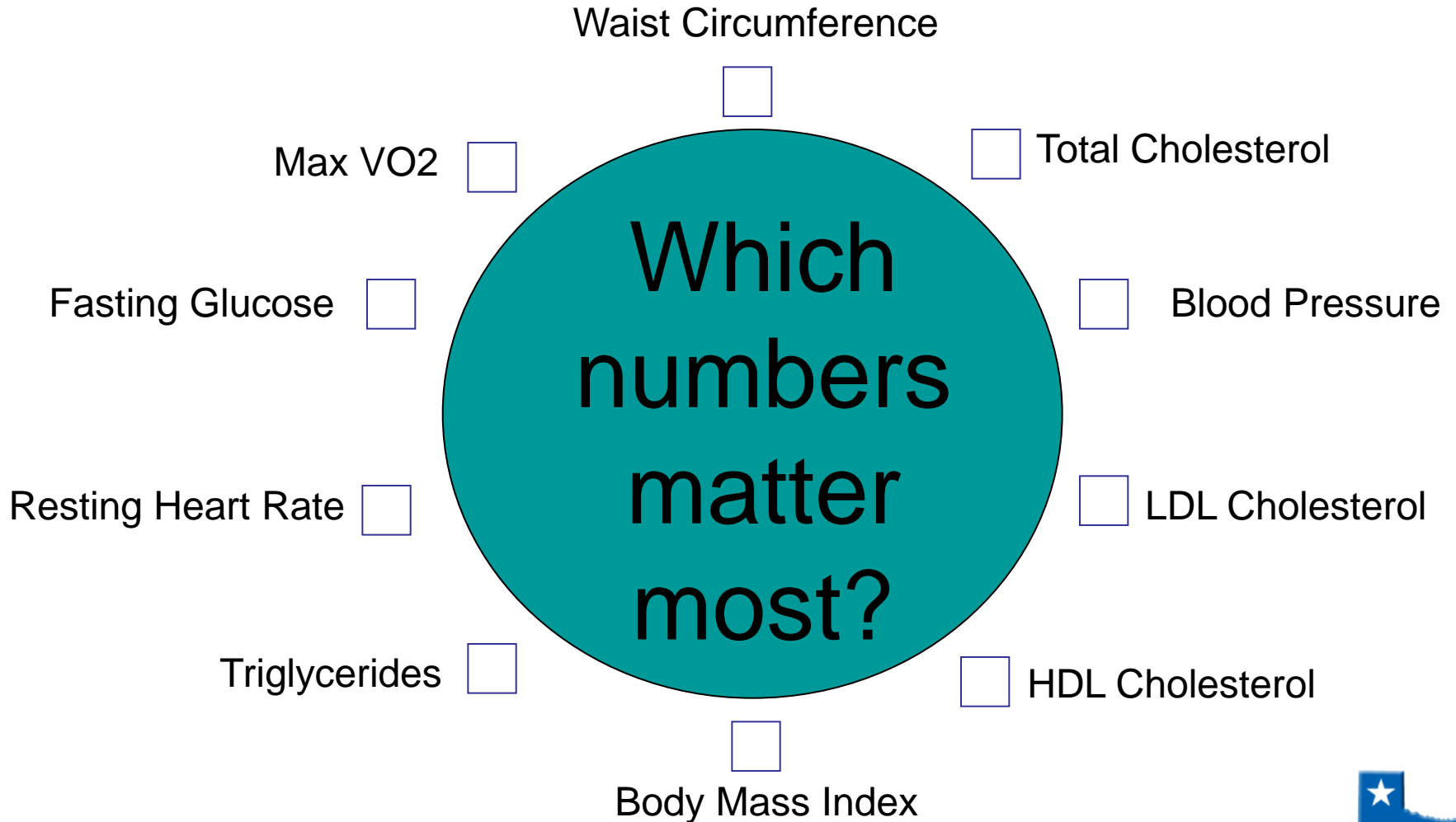
"If you hadn't done those tests to find out what's wrong with me, I'd still be healthy!"

The Enemy

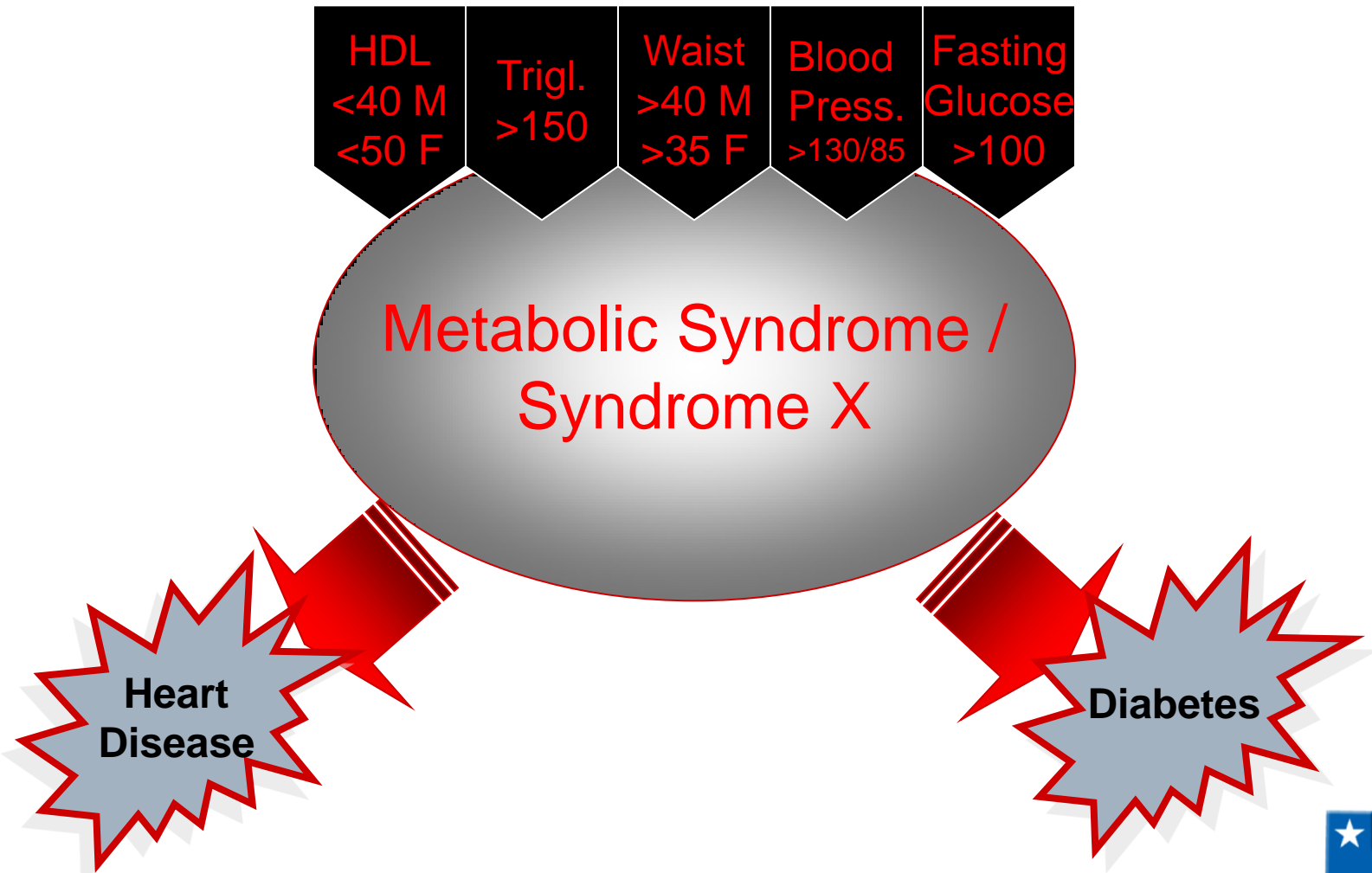
Before we could design a wellness model to reverse our workforce's unwell inertia, we had to first navigate a myriad of disease symptoms to define the singular source of our problems: Metabolic Syndrome.



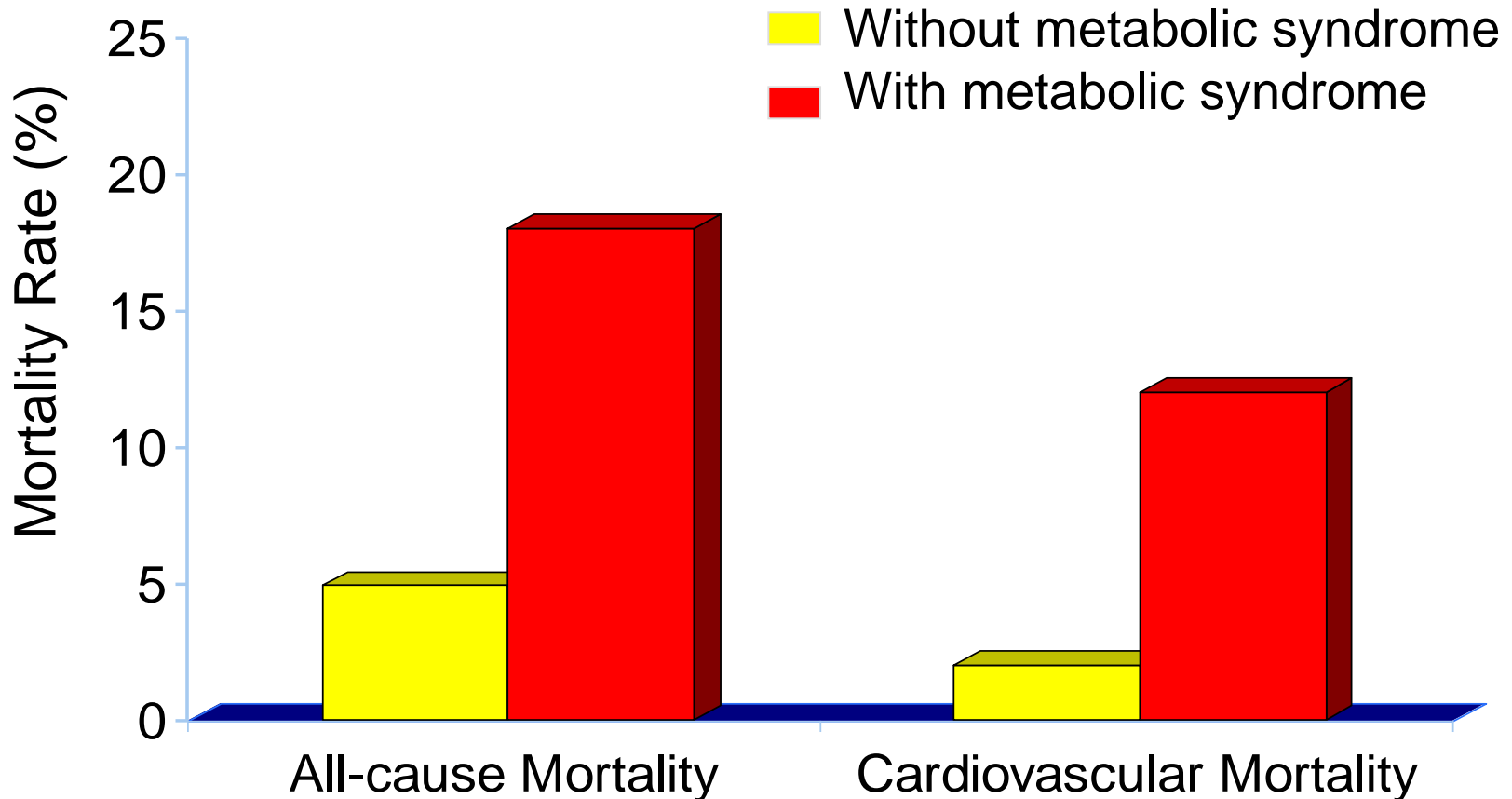
Testing for Metabolic Syndrome



Risk Factors for Men and Women

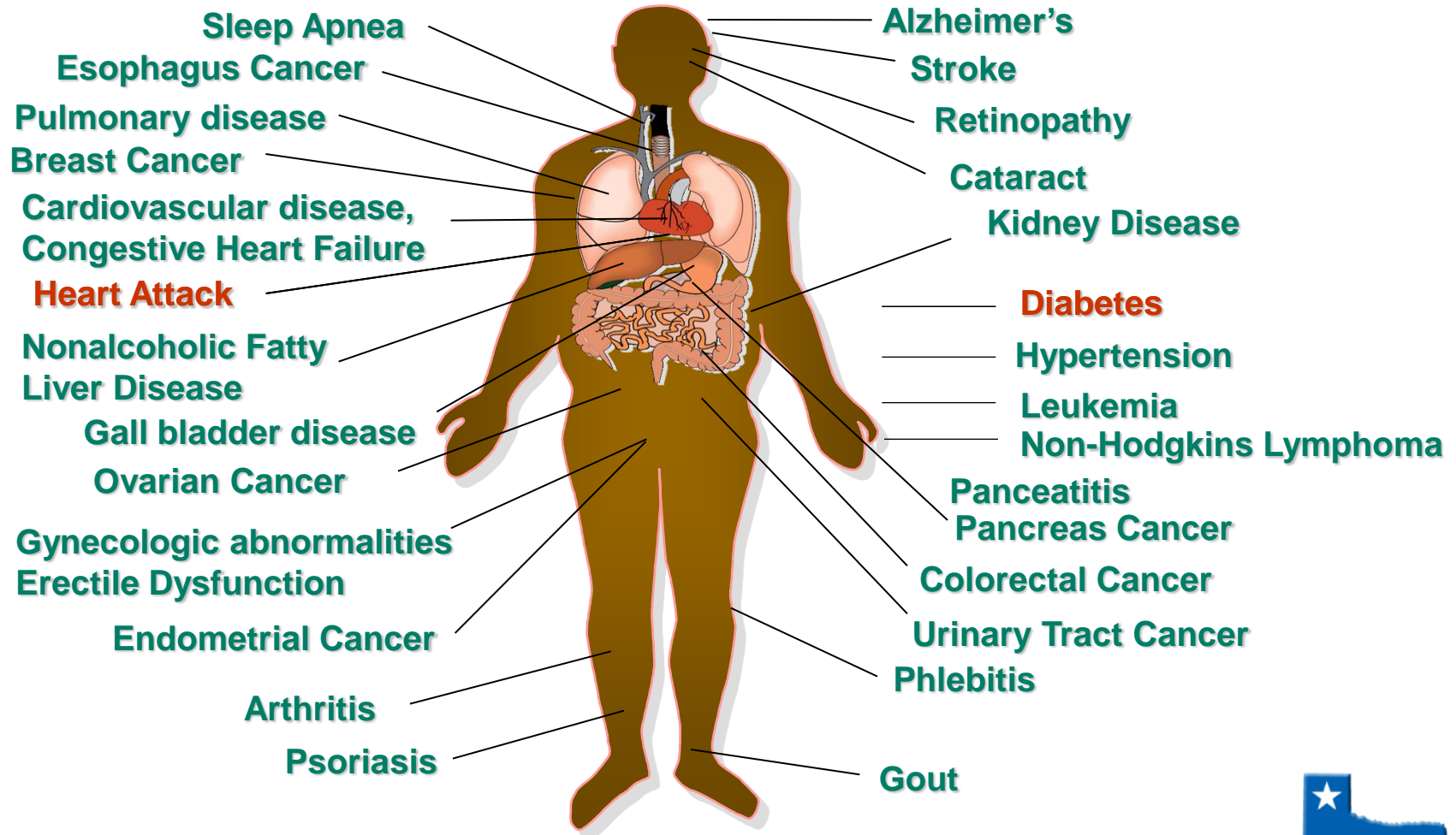


Impact on Mortality



Isomaa B et al. *Diabetes Care*. 2001;24:683-689.

Perceived Increased Health Risk



Why Programs Fail



- They utilize the Taj Mahal approach.
- They recycle the same ineffective weight-loss programs (symptom) rather than targeting Met S (source).
- They lack practical education and personal accountability.

- They are based on dated bodybuilding-inspired protocol rather than a dynamic functional movement.
- They utilize external rather than internal scoring criteria.
- They are not fun.



Redefining Pantex Wellness

The Strategy



Know Your Numbers

- Blood Pressure < 130/85
- HDL Cholesterol > 50mg/dl
- Fasting Glucose < 100mg/dl
- Triglycerides < 150 mg/dl
- Waistline < 35"

Aggressive Intervention

- Naturally Slim
- Get Active

Nutrition and Behavior Education

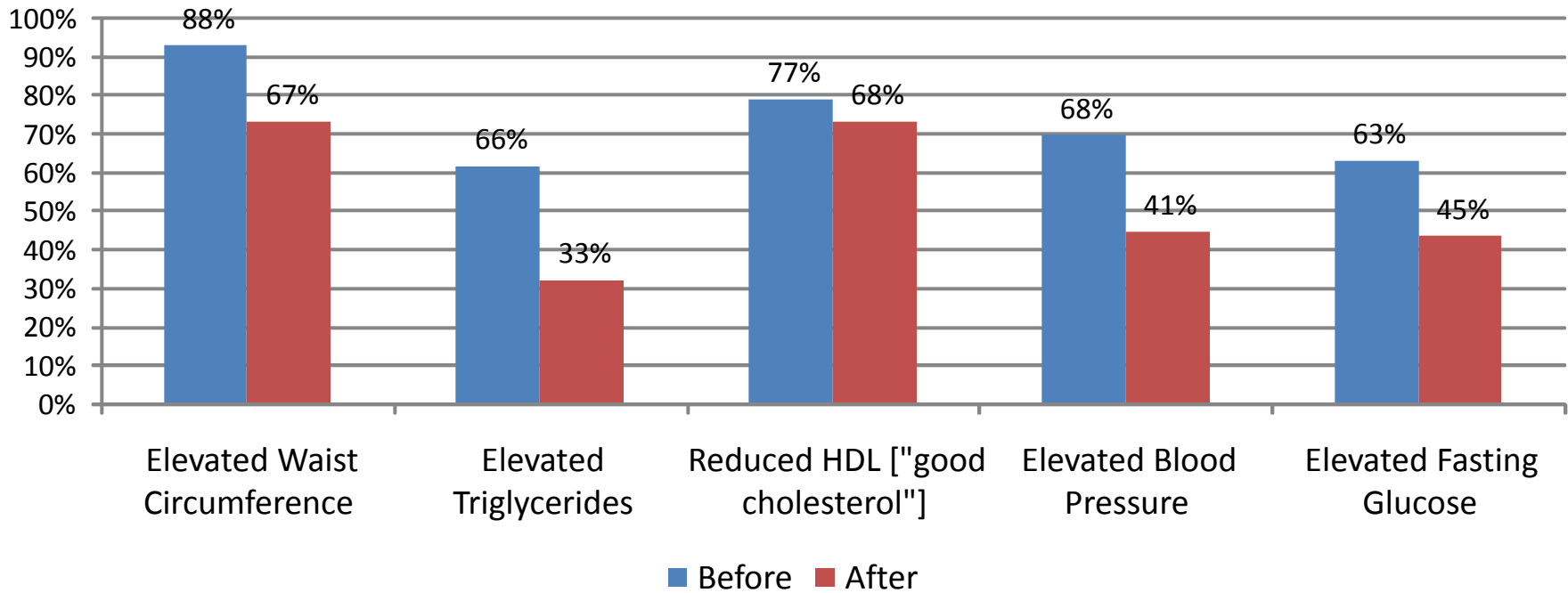
NATURALLY SLIM



- Not another diet! Instead, Naturally Slim is a behavior modification program which reinforces lifelong nutrition success. In only 10 weeks, participants average:
 - 15.5 pounds lost!
 - A 50% reversal in metabolic syndrome!

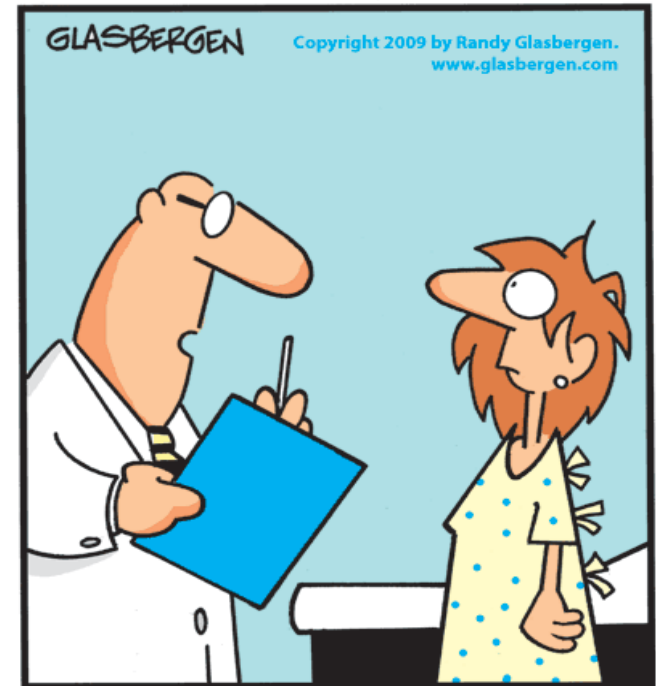
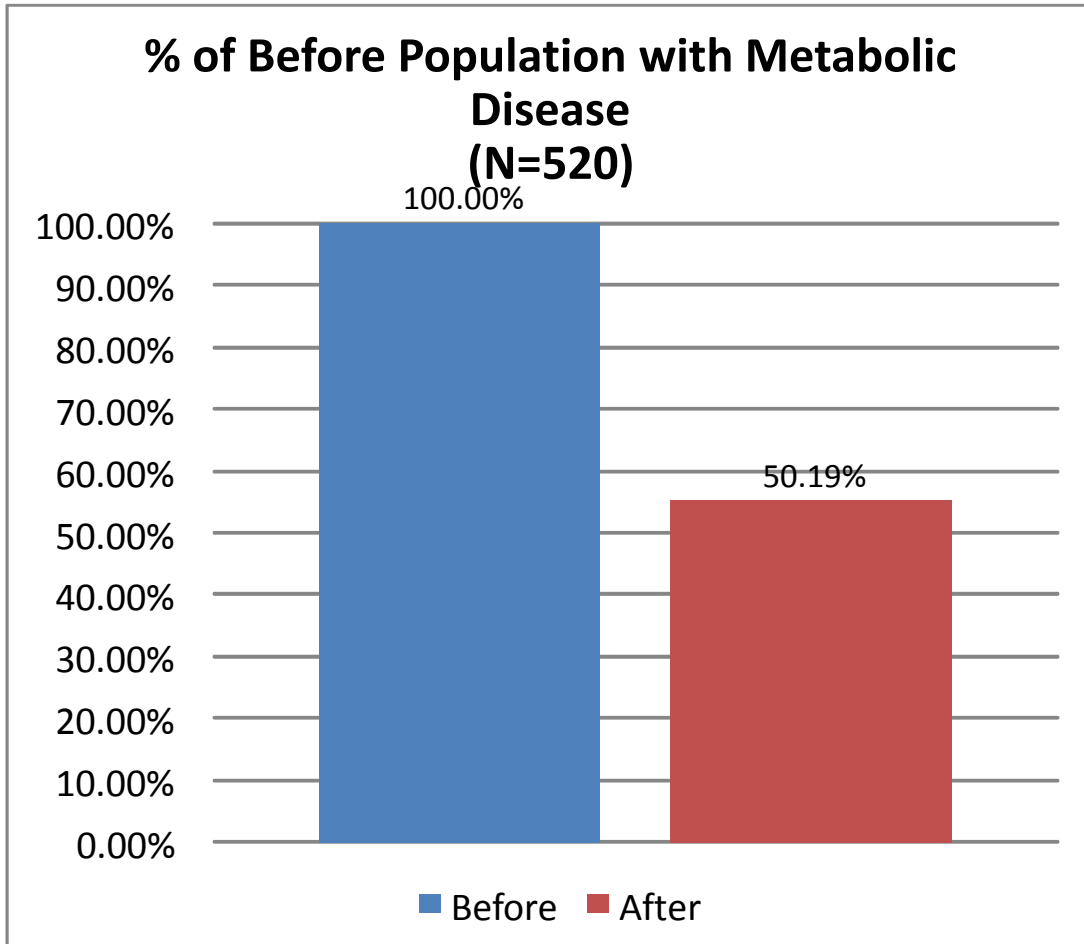
Pantex Pilot Results *post 3 months

Prevalence of Specific Risk Factors in Population
(N=520)



Pantex Pilot Results

*post 3 months



Pantex Pilot Results

Statistics

Average starting weight = 200.9#

Average ending weight = 185.7#

Average weight lost = 15.2# (7.3%)

Biggest weight loser = 53#

Biggest % loser = 19.84%

Total weight lost = 1232#

Met S Factors

0/5: From 6 to 21

1/5: From 8 to 29

2/5: From 25 to 17

3/5: From 21 to 12

4/5: From 14 to 1

5/5: From 7 to 1



What is it Worth?

Average yearly cost of providing health care for an individual without Metabolic Syndrome = <\$3500

Average yearly cost of providing health care for an individual with Metabolic Syndrome = >\$7000

Estimated yearly savings for Pantex on 83 employees after only 10 weeks: >\$196,000



Questions

